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Scientific Abstracts

SAT0303

PAIN MECHANISMS AND ULTRASONIC INFLAMMATORY ACTIVITY AS PROGNOSTIC FACTORS IN PATIENTS WITH PSORIATIC ARTHRITIS: RESULTS OF A DANISH PROSPECTIVE, EXPLORATORY COHORT STUDY


Background: Pain is a major concern for patients with psoriatic arthritis (PsA) in spite of treatment with biologic/conventional disease modifying drugs (b/csDMARDS). Studies on the prognostic role of pain mechanisms in PsA are scarce.

Objectives: To investigate the presence of widespread non-arthritis pain (WP) in patients with PsA, and determine its relation to patient-reported, clinical- and ultrasound (US) disease measures, as well as to achievement of 4 months response to b/csDMARD therapy. Secondly, to study if US Colour Doppler activity (CD) at baseline is associated to treatment response.

Methods: A prospective cohort study was performed following a protocol. Patients initiating b/csDMARDs for PsA were recruited from rheumatology clinics in 31% with CD=0/CD >0, reached ACR20, (p=0.262). was not significantly associated to 4 months response by any criteria, e.g. 19%/up but not to other response criteria (table 1). Presence of CD activity at baseline was not associated with higher NAPSI (9.7±8.0 vs 4.6±7.1, p=0.04 for GS >2).

Conclusions: WP was present in 1/3 of patients, and associated with worse PROs, composite measures, and failure to achieve MDA at follow-up. Neither WP nor CD at baseline was related to other response measures.

REFERENCE


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Disclosure of Interest: None declared

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SAT0304

PRECLINICAL PHASES OF PSORIATIC ARTHRITIS: A CROSS-SECTIONAL ULTRASONOGRAPHIC STUDY ON PSORIASIS AND PSORIATIC ARTHRALGIA PATIENTS

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Background: Identify the preclinical phase of arthritis could be clinically relevant. In this scenario, musculoskeletal ultrasonography (US) may play an important role, since it may detect subclinical disease. Psoriatic Arthritis (PsA) is a perfect disease to identify risk factors, since the risk pool group [i.e. patients with only cutaneous Psoriasis (Pso) is known.]

Objectives: To evaluate in Pso patients, with and without clinical arthralgia (CA), defined by the presence of joint pain without other clinical evidence of musculoskeletal inflammation: I) the prevalence of subclinical US inflammation in joints, entheses, tendons and bursae; II) the prevalence of US structural damage; III) the relationship between US lesions and clinical data.

Methods: Cross-sectional prevalence study of US abnormalities in Pso patients with or without CA and healthy controls (HCs). Inclusion and exclusion criteria (e.g. osteoarthritis and fibromyalgia) are pre-defined. Forty-four joints (MCP, PIP and DIP joints, wrists, knees, MTP joints) and 12 entheses (achillics, quadriceps, proximal and distal patellar, plantar aponeurosis and common extensor tendon enthesis) were scanned in each patient. Active synovitis was defined by the presence of a grade ≥2 for grey scale (GS) and ≥1 for PD, while active enthesis if there was hypoecogenity in GS and an enthesal PD signal (≥2 mm from bone insertion).

Results: Sixty-four Pso patients and 21 HCs were included; globally 2816 joints and 768 entheses were scanned. Twenty-three out of 64 (35.9%) Pso patients displayed CA. Baseline characteristics are reported in table 1. Active synovitis was found, in at least one joint, in 20/64 (31.3%) Pso patients and 0/21 HCs (p=0.002), while active enthesis in 14/64 (21.9%) Pso patients and 0/21 HCs (p=0.017). No significant differences were found for active synovitis or enthesis between the two subgroups of Pso, with or without CA. In the Pso cohort, 5/23 (23.8%) patients with CA and 2/41 (5%) without CA displayed tenosynovitis or paratendinitis (p=0.042). Furthermore, active synovitis, as well as GS-synovitis ≥2, was associated with higher NAPSI (9.7±8.0 vs 4.6±7.1, p=0.04 for GS >2).
whereas active enthesis was associated with higher PASI (5.4±3.0 vs 3.7±2.9, p=0.02). No significant differences were found between PsO patients and HCs for the structural damage (i.e. osteoporosis and erosions), both for joints and enthesis.

Abstract SAT0304 – Table 1. * p significant PsO vs CA vs HCs; ** p significant PsO with CA vs PsO without CA

<table>
<thead>
<tr>
<th>Baseline data</th>
<th>PsO without CA (n=45)</th>
<th>PsO with CA (n=23)</th>
<th>Healthy controls (n=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age mean (SD)</td>
<td>55.37 (5.88)</td>
<td>49.95 (13.22)</td>
<td>45.78 (5.88)</td>
</tr>
<tr>
<td>Female (%)</td>
<td>23 (51.1%)</td>
<td>10 (44.0%)</td>
<td>12 (52.1%)</td>
</tr>
<tr>
<td>Smoking (%)</td>
<td>12 (20.9%)</td>
<td>2 (10.4%)</td>
<td>6 (26.1%)</td>
</tr>
<tr>
<td>BMI mean (SD)</td>
<td>26 (5.35)</td>
<td>27 (6.43)</td>
<td>24 (6.24)</td>
</tr>
<tr>
<td>Clinical data</td>
<td>PsO without CA (n=45)</td>
<td>PsO with CA (n=23)</td>
<td>Healthy controls (n=23)</td>
</tr>
<tr>
<td>VAS pain (0-10) mean (SD)</td>
<td>2 (1.4)</td>
<td>4 (2.4) **</td>
<td>2 (2.3)</td>
</tr>
<tr>
<td>HAQ mean (SD)</td>
<td>0.6 (0.5)</td>
<td>0.9 (0.65)</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>Joints tenderness mean</td>
<td>0.34 per patient</td>
<td>2.56 per patient **</td>
<td>6.17 per patient</td>
</tr>
<tr>
<td>Comorbidities</td>
<td>PsO without CA (n=45)</td>
<td>PsO with CA (n=23)</td>
<td>Healthy controls (n=23)</td>
</tr>
<tr>
<td>Obesity (%)</td>
<td>4 (8.9%)</td>
<td>0 (0.0%)</td>
<td>1 (4.4%)</td>
</tr>
<tr>
<td>Diabetes Mellitus (%)</td>
<td>3 (6.7%)</td>
<td>0 (0.0%)</td>
<td>2 (5.5%)</td>
</tr>
<tr>
<td>Hypertension (%)</td>
<td>7 (15.6%)</td>
<td>7 (30.4%)</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Metabolic syndrome (%)</td>
<td>5 (11.2%)</td>
<td>3 (13.4%)</td>
<td>4 (18.9%)</td>
</tr>
<tr>
<td>Fatty liver disease (%)</td>
<td>5 (11.2%)</td>
<td>4 (17.4%)</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Urinary (%)</td>
<td>2 (4.4%)</td>
<td>0 (0.0%)</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Depression (%)</td>
<td>2 (4.4%)</td>
<td>3 (13.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>CV disease (%)</td>
<td>3 (6.7%)</td>
<td>0 (0.0%)</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

Conclusions: In Psoriasis subclinical US active synovitis and/or enthesis are present in 20%–30% of patients. In PsO the comparison between groups, with or without CA, show no significant difference in active subclinical synovitis or enthesis, but PsO patients with CA present more frequently US tenosynovitis or paratenonitis. In PsO subclinical US synovitis or enthesis are significantly associated with higher NAPSI and PASI. The relevance of these results, to possibly identify a subgroup of PsO more prone to develop PsA, deserves further investigation and prospective evaluation.

Disclose of Interest: None declared


SAT0305

ASSESSMENT OF SUB CLINICAL HAND JOINT SYNOVITIS IN PATIENTS WITH PSORIATIC ARTHRITIS AND PSORIASIS BY ULTRASOUND AND ITS RELATIONSHIP WITH CLINICAL DISEASE ACTIVITY

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Background: Articular involvement in Psoriatic arthritis (PsA) can have diverse presentations; oligoarticular involvement is predominant in early disease. Ultrasound (US) detected subclinical synovitis can be present in early PsA and a substantial portion of oligoarticular PsA patients are being reclassified as having higher NAPSI and PASI. The relevance of these results, to possibly identify a subgroup of PsO more prone to develop PsA, deserves further investigation and prospective evaluation.

Objectives: To evaluate sub-clinical synovitis of hand joints in patients with PsA and PsO by B-mode and Power Doppler US. Correlation of PsA and PsO disease activity with US detected synovitis.

Methods: 27 patients of PsA (disease duration <2 years, no clinical evidence of hand joint involvement), 36 Pso patients and 30 controls were recruited. PASI and DAPSA score used for assessment of cutaneous and articular disease activity respectively. US [grey scale (GS) and power Doppler (PD)] used to assess synovitis of hand joints, most commonly in wrist joint followed by DIP3 and MCP3. No significant increase of subclinical synovitis and enthesis was noted between numbers of joints with subclinical synovitis and disease activity indices.

Conclusions: Almost two third patients with early PsA had PDUS evidence of subclinical synovitis in hand joints, most commonly in wrist joint followed by DIP3 and MCP3. No significant increase of subclinical synovitis in PsO compared to control group. However, wrist and DIP joint involvement was significantly more in Psoriasis.

REFERENCES:

Disclosure of Interest: None declared


SAT0306

FINGER FLEXOR TENDON PULLEY COMPLEX INVOLVEMENT IN PSA DACYLITIS: AN ULTRASONOGRAPHY STUDY


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Background: Dactylitis is a hallmark of psoriatic arthritis (PsA) occurring in around 40% of cases at some point in the disease course. At the micro anatomical level PsA is strongly linked to disease localisation to entheses and other sites of high mechanical stress. Recently high resolution MRI has shown prominent abnormalities at the mini-entheses of the flexor tendon pulleys may be common

Objective: In this study we aimed to understand the changes within the pulleys for patients with PsA, with or without dactylitis to explore the role of the pulley disease in the dactylitis.

Methods: Consecutive 20 cases of PsA with dactylitis were recruited and had an US scan of the A1, A2 and A4 pulleys of the digit with dactylitis and the contralateral side. A high resolution probe (22 MHz) was used to explore a) the thickness of the pulleys, b) the presence of Doppler signals. A comparison was made within digits with or without dactylitis.